CLAIMS

What is claimed is:

5   1.   A method for an operating system to operate a system component, the operating system configurable to drive a plurality of system components, the method comprising:

identifying a component;

obtaining parameter information comprising power characteristics of the

10   component from nonvolatile memory;

characterizing the component using the parameter information, wherein the characterization allows the operating system to operate the identified component.

2.   The method of claim 1, wherein the system is a cable modem.

3.   The method of claim 2, wherein the component is a tuner.

15   4.   The method of claim 3, wherein operating the component comprises varying RF transmission power.

5.   The method of claim 3, wherein parameter information comprises IF output information.

6.   The method of claim 3, wherein parameter information comprises band

20   crossover frequency information.

7.   The method of claim 3, wherein parameter information comprises IF AGC Gain Threshold information.

8.   The method of claim 3, wherein parameter information comprises RF AGC Gain Threshold information.

25   9.   The method of claim 3, wherein parameter information comprises component address information.

10.   A system having interchangeable components, the system comprising:

means for identifying a component;

means for obtaining parameter information comprising power characteristics of

30   the component from nonvolatile memory;

means for characterizing the component using the parameter information, wherein the characterization allows a cable modem operating system to operate the identified component.

11.   The system of claim 10, wherein the component is a cable modem tuner.

12. The system of claim 11, wherein operating the component comprises varying RF transmission power.

13. The system of claim 11, wherein parameter information comprises IF output information.

14. The system of claim 11, wherein parameter information comprises band crossover frequency information.

15. The system of claim 11, wherein parameter information comprises IF AGC Gain Threshold information.

16. The system of claim 11, wherein parameter information comprises RF AGC Gain Threshold information.

17. The system of claim 11, wherein parameter information comprises component address information.

18. A computer program product comprising computer code for an operating system to operate a system component, the operating system configurable to drive a plurality of system components, the computer program product comprising:

computer code for identifying a component;

computer code for obtaining parameter information comprising power characteristics of the component from nonvolatile memory;

computer code for characterizing the component using the parameter information, wherein the characterization allows the operating system to operate the identified component.

19. The computer program product of claim 18, wherein the system is a cable modem.

20. The computer program product of claim 19, wherein the component is a tuner.

21. The computer program product of claim 20, wherein operating the component comprises varying RF transmission power.

22. The computer program product of claim 20, wherein parameter information comprises IF output information.

23. The computer program product of claim 20, wherein parameter information comprises band crossover frequency information.

24. The computer program product of claim 20, wherein parameter information comprises IF AGC Gain Threshold information.

25. The computer program product of claim 20, wherein parameter information comprises RF AGC Gain Threshold information.

26. The computer program product of claim 20, wherein parameter information comprises component address information.

27. A method for a cable modem operating system to drive a tuner, the operating system configurable to drive a plurality of different tuners, the method comprising:

obtaining parameter information associated with a tuner from a nonvolatile memory;

characterizing the tuner using the parameter information, wherein the characterization allows the cable modem operating system to drive the tuner.

28. The method of claim 27, wherein the nonvolatile memory is flash memory.

29. The method of claim 28, wherein the tuner is a cable mode RF tuner.

30. A method for providing parameter information associated with a tuner to an operating system, the method comprising:

identifying parameter information associated with a tuner;

writing parameter information associated with the tuner into a nonvolatile memory, wherein the nonvolatile memory is configured to provide parameter information to an operating system to allow the operating system to drive the tuner.

31. The method of claim 30, wherein the nonvolatile memory is flash memory.

32. The method of claim 31, wherein the tuner is a cable mode RF tuner.

33. A cable modem comprising:

a tuner;

nonvolatile memory containing parameter information associated with the tuner, wherein the parameter information is provided to an operating system to allow the operating system to drive the tuner.

34. The apparatus of claim 33, wherein the nonvolatile memory is flash memory.

35. The apparatus of claim 34, wherein the tuner is a cable mode RF tuner.

36. The apparatus of claim 35, wherein parameter information comprises IF output information.

37.   The apparatus of claim 35, wherein parameter information comprises band crossover frequency information.

38.   The apparatus of claim 35, wherein parameter information comprises IF AGC Gain Threshold information.

39.   The apparatus of claim 35, wherein parameter information comprises component address information.

40.   The apparatus of claim 33, wherein driving the component comprises varying RF transmission power.